

Atty Docket No. JCLA6897-R

Serial No. 10/091,945

AMENDMENTS**In The Claims:**

Claim 1. (currently amended) A cavity down ball grid array packaging structure, comprising:

a heat spreader;

a ground substrate bonded onto the heat spreader without any sandwiched layer except adhesive material, the ground substrate having an opening exposing the heat spreader;

a substrate bonded to the ground substrate, wherein the substrate comprises at least an insulating layer, a patterned wiring layer, and a via formed through the insulating layer and the patterned wiring layer and electrically connected to the ground substrate, and the patterned wiring layer comprises at least a ball pad, a first contact pad, and a first ground pad spaced apart from and electrically connected to the via, wherein the first ground pad is electrically connected to the via through a ground conductive wiring, and a conductive material filled in the via overlays with a portion of the ground conductive wiring;

a chip having an active surface and a corresponding back surface, the chip bonded into the opening of the ground substrate and onto the heat spreader via the back surface thereof, the chip including at least a second contact pad and a second ground pad, the second contact pad and the second ground pad positioned on the active surface of the chip;

a first conductive wire connecting the first contact pad with the second contact pad;

a second conductive wire connecting the second ground pad with the ground substrate;

an encapsulant material encapsulating the chip, the first and second conductive wires; and

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a plurality of solder balls attached to the ball pad and the first ground pad but apart from the via.

Claims 2-9. (canceled)

Claim 10. (currently amended) A cavity down ball grid array packaging carrier, suitable for use in a chip packaging structure, the cavity down ball grid array carrier comprising:

a heat spreader;

a ground substrate bonded onto the heat spreader without any sandwiched layer except adhesive material, the ground substrate having an opening exposing the heat spreader; and

a substrate bonded to the ground substrate, wherein the substrate comprises at least an insulating layer, a patterned wiring layer, and a via formed through the insulating layer and the patterned wiring layer and electrically connected to the ground substrate, and the patterned wiring layer comprises at least a ball pad, a contact pad, and a ground pad spaced apart from and electrically connected to the via, wherein the first ground pad is electrically connected to the via through a ground conductive wiring, and a conductive material filled in the via overlays with a portion of the ground conductive wiring.

Claims 11-14. (canceled)